

早稲田大学大学院 経済学研究科

# 博士論文概要書

TRANSPORTATION COSTS AND INTERNATIONAL TRADE:  
AN ANALYSIS OF THE LANDLOCKED – TRANSIT COUNTRIES

輸送コストおよび国際貿易：内陸一通過諸国の分析

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Four main landlocked-transit countries' policies were analyzed in this thesis. In the first chapter, the organization and background of the study and the base theoretical explanation were introduced, followed by three analytical chapters. In the second chapter, the transit fee and transportation subsidy were analyzed. In this model, it is assumed that the coastal (transit) country imposes the transit fee while the landlocked country subsidizes its firm transportation. As the landlocked firm needs to use the seaport which is located in the coastal (transit) country, then it needs to pay the transit fee. The transit fee consists of all transit charges, i.e. truck fee, driver fee, and carnet. In the third chapter, the transportation cost reducing R&D and transit fee were analyzed. It is assumed that the landlocked firm invests in a process of reducing its transportation costs, i.e. packaging, quality maintaining technology, and fuel-efficient technology. Meanwhile the landlocked government subsidizes its firm's transportation R&D. Nevertheless, the landlocked firm is subject to the transit fee of the transit country. In the fourth chapter, the landlocked and coastal (transit) countries' infrastructure provision was analyzed. Associated with the transit fee, the landlocked and coastal (transit) countries are assumed to be providing the transportation infrastructure non-cooperatively. The landlocked and coastal countries are assumed to provide the transportation infrastructure non-cooperatively. Meanwhile, the coastal (transit) country charges the transit fee. All models are based on the international imperfect competition analysis of the third-market model.

The first model has demonstrated that both policies are optimal. Therefore, the landlocked government attempts to reduce its firm transportation cost burden by directly subsidizing the unit transportation cost. Meanwhile, the coastal (transit) has the credibility to impose the transit fee in order to help its firm capture international market shares. This model is based on the initial paper that has been presented at the Hitotsubashi Conference on International Trade and Industrial Organization, 31 July – 1 August, 2010, Hitotsubashi University, Japan, with the title the “International Rivalry between Landlocked and Coastal Countries, and Strategic Transportation Policies”.

In the second model, the study has shown that the landlocked country’s R&D subsidy is positive and so is the transit fee. The landlocked country may use the indirect subsidy since the direct transportation subsidy is considered as export subsidies. This model has been published in the Review of Development Economics, 18 (4), 804-812 with the title “Export Competition between Landlocked and Coastal Countries: An analysis of Strategic Export Policies”. This paper was written with Prof. Ishii Yasunori.

In the third model, it is proven that the infrastructure provisions of both countries are optimal. Despite the landlocked firm needs to pay the transit fee, it gains the benefit of the coastal (transit) country’s infrastructure. This paper is an extended model of the original paper that has been published in the proceeding of the Canadian Economic Association (CEA) 43rd Annual Conference 28-31 May, 2009, University of Toronto, Canada, with the title “Transport Costs, International Rivalry between Landlocked and Coastal Countries, and Strategic Transportation Policies”. In addition, this model has been applied in the paper with the

title “Strategic Trade Policy and Integrated Infrastructures”, in which it is accepted to be presented at the International Association Maritime Economists (IAME) 2015 Conference, August 24-26, 2015, Kuala Lumpur, Malaysia.

This thesis has highlighted the three main agendas in the Almaty Programme of Actions which has been announced by the United Nations. This global development policy has been implemented in order to solve the problem of the landlocked country and its transit countries. Thus, the present work has presented an insight into this problem by studying it in the strategic trade policy analysis framework.

The study also has contributed to new knowledge in several ways. First, it applies the strategic trade policy framework for analyzing the problem of landlocked country’s transportation. Second, it introduces an asymmetrical geographical condition into the strategic trade policy model. Third, the study proves that the transportation costs are beyond the distance. And, finally, it proposes that transit revenue is an applicable policy.